moderate liberation of the urethra permits them to be brought together by sutures. But it is not necessary to suture them together in their whole circumference, a large opening in the bladder being left posteriorly. Through this opening a large tube is passed and fixed in position with a catgut suture. The muscles of the perineum are then restored very incompletely and a large drain is introduced penetrating to the side of the vesical tube. The skin margins are then brought together, leaving a large median opening for gauze drainage. The results of this operation in two cases were benign. At the end of five weeks in the first patient all urine passed in the natural way and in the second patient more quickly, without the necessity of catheterization or dilatation.

Traumatic Epilepsy after Head Injuries in the Japanese-Russian War.—Eguchi (*Deutsch. Zeitschr. f. Chir.*, 1913, cxxi, 199) says that head injuries frequently produce traumatic epilepsy. From 1.3 to 4.7 per cent., on the average 3 per cent., of all skull injuries admitted to the reserve hospitals of Japan during the war were followed by traumatic epilepsy. In these, injuries of the bone and dura mater produced irritation of the brain. Wounds of the soft tissues alone gave no cases of epilepsy. The symptoms followed not only injuries of the cortex in the motor area, but many times injuries in other areas. The traumatic epilepsy appears usually after cicatricial tissue develops, Its occurrence at an earlier stage is very rare. It was more frequent after sagittal than after transverse gun-shot wounds. The frequency was in proportion to the size of the brain injury. The autopsy did not show in any case any changes in the medulla, pons, or cerebellum. Scars of the head are very irritable in cases of traumatic epilepsy, and are very tender on palpation. If a bone defect is covered only with a flap of soft tissues, the pulsation of the brain can be seen. The soft tissue flap used corresponded to that of Kocher. Adhesions between the dura or skin and the brain frequently produce epilepsy, as does traumatic new formation, such as thickening of the inner table of the skull, cysts, abscesses, etc. Foreign bodies, pieces of bone, and in war especially, splinters of bone or pieces of missiles, cause epilepsy by pressure on the dura and brain. All of Eguchi's cases developed a nervous disposition. Epilepsy develops easily after head injuries in nervous people. The shortest period from the day of the injury to the beginning of the epilepsy was 3 days, the longest was 442 days, the average 161 days. Medicines, especially the bromides, cannot suppress the attacks before operation, but after operation has been done the attacks, which recur in some cases, can be more quickly controlled by the bromides. Operation gave good results in Eguchi's cases. A cure was obtained in 11 cases, or 90.9 per cent., and no results in 1 case, or 9.1 per cent. The death in this last case was not the result of the operation, but of the bursting of an aneurysm. In all of the other cases no attack had occurred two years after operation. One should operate on all cases of traumatic epilepsy from head injuries in which he detects scars, or wounds, or other changes. If the epilepsy developed a short time before the operation, a quick result should be expected. If the attacks have been occurring for a much longer period, the operation may be followed by several attacks.

Partial convulsions disappear more quickly after operation than general convulsions. In operating, two kinds of flaps may be employed; without a bone defect, like that of Wagner, and with a bone defect covered by a soft tissue flap. Pieces of bone, foreign bodies, and bone thickening should be removed. Adhesions should be separated between the skin and bone, bone and dura, and dura and brain. The dura may be excised. Cysts and abscesses should be incised and scars excised.

Treatment of Spontaneous Gangrene of the Extremities.—KOGA (*Deutsch. Zeitschr. f. Chir.*, 1913, cxxi, 371) says that spontaneous gangrene of the extremities from arteriosclerosis in the young is more common in Japan than in Europe. His chief, Ito, attributed this to the greater use of a vegetable diet in Japan. Until the present time we have been almost powerless to prevent threatening angiosclerotic gangrene, or to restrain it when it develops. The results of arteriovenous anastomosis have not been favorable. In only 8 out of 63 cases collected by Zesas was improvement or a cure obtained. Koga has tested the viscosity of the blood in a series of cases of spontaneous gangrene and found it almost always of much value. Reduction of the increased viscosity by saline infusions influenced the gangrene favorably. The administration of potassium iodide had little or no effect on the gangrene. Koga reports 13 cases, varying in age from twenty-four to forty-eight years. He determined nothing definite as to the etiology, and the urine contained nothing abnormal and particularly no sugar. Syphilis was always excluded, the Wassermann reaction being negative in every case. They were cases of presenile gangrene, in which the viscosity was increased, as a rule, and was reduced to the normal by the saline solution. Simultaneously the symptoms improved, the edematous swelling decreased, as did the cyanosis, and a sharp line of demarcation developed. Ulcers became clean and cicatrized, and the pulsation of the arteries which could not be felt before the introduction of the saline infusion, reappeared. The pain also disappeared so that the patient could sleep, the feeling of cold was not complained of, and the patient could walk a considerable distance. The blood, having its viscosity reduced, gets through the vessels easier and then favors the development of collateral branches. Koga believes that the condition of sclerosis is improved. He reviewed his cases last December, by mail, and found that the improvement or cure had lasted a variable period. In one case amputation had been done for recurrence. In another a black spot had appeared on the same foot. Repeated infusions might have prevented the recurrences. The effect of the infusions on spontaneous gangrene does not appear to be of short duration.

Paralysis of the Phrenic Nerve from the Employment of Kulenkampff's Brachial Plexus Anesthesia.—SEIVERS (*Zentralbl. f. Chir.*, 1913, xl, 338) reports the following experience following the injection of the brachial plexus above the clavicle for anesthetization of the upper extremity. It was done for the treatment of a wound of the soft tissues on the ulnar side of the right hand, in a healthy young man, and 20 c.c. of a 2 per cent. novocain bicarbonate solution was